



Economic and Social Council

Distr.
GENERAL

E/C.10/1993/11
17 March 1993

ORIGINAL: ENGLISH

COMMISSION ON TRANSNATIONAL CORPORATIONS
Nineteenth session
5-15 April 1993
Item 7 of the provisional agenda*

ACTIVITIES OF THE TRANSNATIONAL CORPORATIONS
AND MANAGEMENT DIVISION AND ITS JOINT UNITS

The universe of transnational corporations

Report of the Secretary-General

SUMMARY

The universe of transnational corporations, comprising parent corporations and their affiliates world wide, is large, diverse and expanding. Parent transnational corporations, the majority of which are located in developed countries, include companies of varying size, but are characterized by considerable concentration in terms of ownership and control over assets abroad. Foreign affiliates are spread more evenly between developed and developing countries, although their size and investment activities in developing countries are much smaller than those in developed countries. There are differences in the sectoral distribution and the degree of transnationalization of corporations from different home countries. Those differences are also reflected in the distribution and transnationalization of the largest 100 transnational corporations. The importance of transnational corporations as global market operators and the concentration of their international production activities, are the basis for the emerging international production system.

* E/C.10/1993/1.

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
INTRODUCTION	1 - 3	4
I. THE UNIVERSE OF TRANSNATIONAL CORPORATIONS	4 - 20	4
A. Parent transnational corporations	5 - 10	8
B. Foreign affiliates	11 - 20	12
II. CONCENTRATION OF TRANSNATIONAL CORPORATION ACTIVITY ...	21 - 23	18
III. THE LARGEST 100 TRANSNATIONAL CORPORATIONS	24 - 28	22
IV. TRANSNATIONALIZATION DURING THE 1980s	29 - 34	31
CONCLUSIONS	35 - 37	36

Tables

1. Number of parent transnational corporations and foreign affiliates for developed countries and selected developing host countries, by area and country	5
2. Parent transnational corporations that are also affiliates of foreign transnational corporations	9
3. Distribution of parent transnational corporations from Japan and the United States, by sector	10
4. United States transnational corporations and their foreign affiliates, 1982 and 1989	11
5. Average size of outward foreign affiliates of transnational corporations from selected countries, in terms of foreign direct investment per affiliate	13
6. Distribution of United States affiliates abroad, by region and country, 1990	14
7. Distribution of foreign affiliates of German transnational corporations, by area and country, 1984 and 1990	16
8. Distribution of outward affiliates of major investing countries, by sector	17
9. Concentration of ownership of foreign affiliate assets or foreign direct investment	19

CONTENTS (continued)

	<u>Page</u>
10. Small- and medium-sized transnational corporations and their affiliates as a proportion of all transnational corporations from Japan and the United States of America	21
11. The largest 100 non-financial transnational corporations, ranked by foreign assets, 1990	23
12. Transnationalization and concentration ratios for the largest 100 transnational corporations, by assets and foreign sales, 1990	27
13. The largest transnational corporations from four major home countries and others, by industry, 1990	28
14. The largest 100 transnational corporations, and their foreign and total assets, by home country, and gross national product for home countries, 1990	29
15. The largest 100 transnational corporations, number of firms and assets, by industry, 1990	30
16. Share of foreign affiliate assets, sales and employment in totals for United States transnational corporations, by industry of parent, 1982 and 1989	32
17. Transnationalization of German enterprises, 1980-1990	34
18. Share of research-and-development expenditures of foreign affiliates of United States transnational corporations, by type of affiliate and industry, 1982 and 1989	35

INTRODUCTION

1. At its eighteenth session, the Commission on Transnational Corporations requested that a report on information activities be prepared for consideration at its nineteenth session. While previous reports on the subject have focused mainly on efforts to establish an information system on transnational corporations, this report utilizes some of the results of those efforts to outline the dimensions and some of the characteristics of the universe of transnational corporations. The present report complements the analysis of the reports before the Commission on trends in foreign direct investment (E/C.10/1993/2); the growth of foreign direct investment in the 1980s: trend or bulge (E/C.10/1993/3); and the emergence of an integrated international production system (E/C.10/1993/4).

2. The universe of transnational enterprises is large, diverse and expanding. It comprises hundreds of large corporations and thousands of smaller enterprises that, taken together, span the globe across all major sectors of economic activity. While the great majority of transnational corporations originates in developed countries, during the 1980s a growing number of firms headquartered in developing countries have also become part of the universe of transnational corporations.

3. Nevertheless, the universe of transnational corporations is characterized by a high degree of concentration: large proportion of transnational corporations originate in a few home countries and the majority of foreign affiliates are located in a relatively small number of host countries. Moreover, the universe is highly concentrated in terms of the share of foreign assets controlled by the largest firms, although the role of small- and medium-sized enterprises is significant and growing. Data on the operations of all parent companies based in selected countries, as well as on the largest 100 transnational corporations world wide, substantiate the high degree of concentration and illustrate the degree of transnationalization of enterprises.

I. THE UNIVERSE OF TRANSNATIONAL CORPORATIONS

4. According to estimates based largely on national official sources, the number of parent transnational corporations in the world at the beginning of the 1990s was over 35,000, controlling some 170,000 foreign affiliates (table 1). 1/

Table 1. Number of parent transnational corporations and foreign affiliates for developed countries and selected developing host countries, by area and country

(Number)			
Area/economy	Parent corporations based in country	Foreign affiliates in country <u>a/</u>	Year
Developed countries	32 800	78 200	
of which:			
Australia	1 036	695	1992
Austria	679	2 221	1990
Belgium and Luxembourg	96	1 121	1978
Canada	1 308 <u>b/</u>	5 874	1991
Denmark	800	647 <u>c/</u>	1992
Finland	1 300	1 000	1992
France	2 056	6 870	1990
Germany	6 984	11 821	1990
Greece	...	798	1981
Iceland	14 <u>d/</u>	28	1991
Ireland	30	956	1992
Italy	263	1 438	1992
Japan	3 529 <u>e/</u>	3 150	1992
Netherlands	1 426	2 014	1992
New Zealand	201	1 078	1991
Norway	1 321	2 854 <u>f/</u>	1990
Portugal	...	3 068	1990
South Africa	...	1 884	1978
Spain	744	6 232 <u>g/</u>	1992
Sweden	3 529	2 400	1991
Switzerland	3 000	4 000	1985
Turkey	...	267	1989
United Kingdom of Great Britain and Northern Ireland	1 500 <u>h/</u>	2 900 <u>i/</u>	1991
United States of America	3 000 <u>j/</u>	14 900 <u>k/</u>	1990
Developing countries or areas <u>l/</u>	2 700	71 300	
of which:			
Brazil	566	7 110 <u>c/</u>	1992
China	379	15 966 <u>f/</u>	1989
Colombia	...	1 041	1987
Hong Kong	500 <u>m/</u>	2 828	1991
India	187	926 <u>f/</u>	1991
Indonesia	...	1 064	1988
Republic of Korea	1 049	3 671	1991
Mexico	...	8 953	1989
Oman	...	1 489	1989
Pakistan	57	560 <u>g/</u>	1988

/...

Area/economy	Parent corporations based in country	Foreign affiliates in country a/	Year
Philippines	...	1 952	1987
Saudi Arabia	...	1 461	1989
Singapore	...	10 709	1986
Taiwan, Province of China	...	5 733	1990
Yugoslavia	112	3 900	1991
Central and Eastern Europe n/ of which:	400	21 800	
Bulgaria	26	114 b/	1991
Commonwealth of Independent States o/	68 e/	3 900	1992
Czechoslovakia (former)	26 e/	800	1992
Hungary	66 e/	2 400	1992
Poland	58 e/	3 800	1992
Romania	20 e/	6 900	1992
World	35 900	171 300	

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on World Investment Directory, vol. I, Asia and the Pacific (United Nations publication, Sales No. E.92.II.A.11); World Investment Directory, vol. II, Central and Eastern Europe (United Nations publication, Sales No. E.93.II.A.1); World Investment Directory, vol. III, Developed Countries (United Nations publication, forthcoming); and national official and secondary sources.

(Footnotes on following page)

(Footnotes to table 1)

a/ Represents the number of affiliates in the country shown.

b/ For 1990.

c/ For 1986.

d/ For 1989.

e/ For 1991.

f/ For 1988.

g/ For 1987.

h/ Represents a total of 24 bank parents in 1991, and about 1,500 non-bank, non-oil and non-insurance concerns with direct investments above £20 million in 1981.

i/ Represents a total of 2,419 manufacturing affiliates in 1990 and 518 bank affiliates in 1992.

j/ Represents a total of 2,183 non-bank parent corporations in 1990 and 89 bank parent corporations in 1989 with at least one foreign affiliate whose assets, sales or net income exceeded \$3 million, and 723 non-bank and bank parent corporations in 1989 whose affiliate(s) had assets, sales and net income under \$3 million.

k/ Represents a total of 10,142 non-bank affiliates in 1990 and 467 bank affiliates in 1987 whose assets, sales or net income exceeded \$1 million, and 4,336 bank and non-bank affiliates in 1987 with assets, sales and net income under \$1 million. Each affiliate represents a fully consolidated United States business enterprise, which may consist of a number of individual companies. In 1990, 10,142 non-bank affiliates represented 31,388 companies.

l/ Including the largest host countries and countries for which data on parent corporations could be obtained.

m/ For 1982.

n/ Data for affiliates are estimated using number of joint-venture registrations and available information on the number of registrations that are operational.

o/ Relates to the whole of the economic territory of the former USSR.

A. Parent transnational corporations

5. Parent transnational corporations are firms that control assets abroad. The number given above relates only to firms that have equity stakes in firms abroad of either more than 50 per cent (majority-owned foreign affiliates, or subsidiaries) or between 10 and 50 per cent (minority-owned foreign affiliates, or associates). The total does not therefore include the number of firms that control assets abroad through various non-equity ties (such as management contracts, transfer-of-technology contracts, subcontracting agreements and franchising) and that are linked with other firms through strategic alliances. On the other hand, it does include firms that are themselves affiliates of parent transnational corporations based in other countries. The share of parent companies that falls into this latter category varies by home country, ranging from less than one tenth to a third of the number of transnational corporations in the case of countries for which data are available (table 2). Overall, however, even if only ultimate parent companies - companies that are not affiliates of other transnational corporations - are counted, along with corporations with non-equity ties abroad, the world-wide total for transnational corporations would probably total at least equal above estimate. 2/ The existence of non-ultimate parent corporations, joint ventures and strategic and other forms of alliances, however, does raise the question of how to determine the nationality of transnational corporations and their affiliates and which Government retains actual control over them for legal and fiscal purposes.

6. About 90 per cent of transnational corporations originate in developed countries. Less than one per cent of parent corporations are based in the countries in transition in Central and Eastern Europe and the remainder are headquartered in developing countries. This distribution reflects decades of capital accumulation, economic growth and technological progress that have strengthened the competitive and firm-specific advantages of developed country transnational corporations. Among developing countries, those that have become headquarters to transnational corporations include primarily the newly industrializing and larger economies with the financial and technological capabilities for their firms to enter the world economy as direct investors.

7. Five countries - France, Germany, Japan, the Netherlands and the United States of America - are home to 53 per cent of parent transnational corporations based in developed countries. The five are also the largest foreign investors, accounting for nearly two thirds of the outward foreign-direct- investment stock of developed countries. The difference between the two distributions, that is, between their share of transnational corporations and their share of outward foreign direct investment, suggests that transnational corporations from those countries are, on average, larger foreign investors than those from other developed countries.

Table 2. Parent transnational corporations that are also affiliates of foreign transnational corporations

Country	Year	Number of parent transnational corporations	Of which, percentage that are foreign affiliates
Austria	1990	679	17.2
Canada	1990	1 308	33.3
Finland	1992	1 300	3.8
Germany	1990	6 984	8.1 <u>a/</u>
New Zealand	1990/91	201	28.9
Sweden	1991	3 529	11.8
United States of America	1990	2 183 <u>b/</u>	14.6

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on unpublished data from national and other official sources.

a/ Of these, 481 are majority-owned by foreign transnational corporations.

b/ Figures represent only non-bank parents of non-bank foreign affiliates.

8. As to sectoral distribution, some three fifths of all parent transnational corporations headquartered in Japan and the United States are in the manufacturing sector, while two fifths originate in the services sector. This distribution remained almost stable throughout the 1980s, although, in the case of the United States, the number of parent firms in the primary and services sectors decreased slightly, while that in the manufacturing sector increased (table 3). This was largely due to the contraction of foreign activities by United States transnational banks following the international debt crisis, although United States foreign direct investment in finance and insurance taken as a whole increased, particularly in the second half of the 1980s. 3/ However, the number of United States manufacturing transnational corporations grew, with foreign expansion encouraged by the need for lower labour costs, greater access to growing markets and the need to conduct research and development on a global scale. In the case of Japan, the number of parent firms in the primary sector decreased as well, but that in the two other sectors increased. The more uniform expansion of Japanese transnational corporations was driven by, inter alia, a weakening dollar, which made exports from Japan less competitive in price.

Table 3. Distribution of parent transnational corporations from Japan and the United States, by sector

Sector	Japan <u>a/</u>		United States of America <u>b/</u>	
	1980	1990	1982	1989
All				
Number	1 298	1 616	2 245	2 272
Primary				
Number	60	47	166	111
Percentage	5	3	7	5
Manufacturing				
Number	800	994	1 215	1 312
Percentage	62	62	54	58
Services				
Number	438	575	864	849
Percentage	34	36	38	37

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on Japan, Ministry of International Trade and Industry, Kaigai Toshi Tokei Soran, No. 1 (Tokyo, Toyo Hoki Shuppam, 1983); and Wagakuni Kigyo No Kaigai Jigyo Katsudo, No. 21 (Tokyo, Printing Bureau, Ministry of Finance, 1992); United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

a/ Date cover only transnational corporations, excluding those in banking and insurance which responded to a questionnaire on foreign direct investment and which continued their foreign operations.

b/ Only including transnational corporations that have an overseas affiliate whose assets, sales or income exceeded \$3 million.

9. Trends with respect to the number of transnational corporations from major home countries differ, as illustrated by the experience of Germany, Japan and the United States of America. The number of United States parent corporations

decreased between the years 1982 and 1989 (table 4). This decline is mostly attributable to a decrease in the number of smaller transnational corporations with foreign affiliates whose assets, sales or income are below \$3 million. This fall partly reflects the consolidation and restructuring of United States companies during the 1980s. While the number of United States parent companies diminished, their assets and employment both grew markedly during that period.

10. In contrast to the decrease in United States parent corporations, the number of transnational corporations based in Japan increased from 3,247 in 1980 to 3,529 in 1990. 4/ More dramatically, the number of transnational enterprises based in Germany increased from about 3,500 in 1976 to over 6,000 in the late 1980s. 5/ As discussed in the next section on affiliates, however, the extent of transnational corporation activity as measured by foreign direct investment and foreign assets increased for all three countries mentioned above.

Table 4. United States transnational corporations and their foreign affiliates, 1982 and 1989

Item	1982	1989
Number		
Parent firms	3 657	2 995
Large parent firms <u>a/</u>	2 245	2 272
Outward foreign affiliates	33 650	27 086
Large affiliates <u>b/</u>	18 274	18 899
Small affiliates	15 311	8 187
Employment		
Large parent firms (millions)	19.4	19.6
Average for large parent firms	8 641	8 627
Large affiliates (millions)	6.8	6.7
Average for large affiliates	372	354
Assets		
Large parent firms (billions of dollars)	3 754	6 616
Large affiliates (billions of dollars)	1 348	2 055
Small affiliates (billions of dollars)	16	6
Average for large affiliates (millions of dollars)	73.5	108.7
Average for small affiliates (millions of dollars)	1.0	0.7

Sources: United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

a/ Parents with affiliates whose assets, sales or income exceeded \$3 million.

b/ Affiliates whose assets, sales or income exceeded \$3 million.

/...

B. Foreign affiliates

11. Foreign affiliates of transnational corporations world wide are estimated to number nearly 170,000. 6/ Again, the total number of affiliates does not include firms that are linked to parent corporations through various non-equity forms and strategic alliances. No data are available on these, but it is estimated that strategic alliances number in the thousands and subcontracting agreements alone in the hundreds of thousands. 7/

12. Developed countries are hosts of 46 per cent of the foreign affiliates of transnational corporations. Five countries - Canada, France, Germany, the United Kingdom of Great Britain and Northern Ireland and the United States of America - account for over two thirds of the inward foreign-direct-investment stock of developed countries, but host 54 per cent of all affiliates based in developed regions. This suggests that these affiliates are, on average, recipients of higher investment participation than affiliates in other developed countries.

13. However, unlike parent transnational corporations, which are overwhelmingly concentrated in developed countries, 42 per cent of foreign affiliates are located in developing host countries and 13 per cent in the economies in transition of Central and Eastern Europe. At the same time, these areas account for only 17 per cent of the world's inward foreign-direct-investment stock. A comparison of the shares in total affiliates with the shares of the respective regions in the world-wide stock of foreign direct investment suggests that the size of affiliates in the developing economies and the economies of Central and Eastern Europe is small relative to that of affiliates in the developed countries (table 5). In the case of the developing countries, this reflects the small size of many of their markets; in the case of the economies in transition, some of the affiliates represent initial investments, which, following further economic transformation in those countries, are likely to increase both in number and size.

14. Trends in the number of affiliates and the foreign direct investment, assets and employment in those affiliates differ somewhat among transnational corporations from major home countries, as illustrated by the experience of Germany and the United States of America. The number of foreign affiliates of United States transnational corporations decreased between 1982 and 1989 (table 4). However, while foreign direct investment and the assets of United States transnational corporations grew, employment diminished slightly. This suggests that United States transnational corporations bolstered their equity stakes in foreign affiliates, as well as the capital-intensity. In the case of Germany, the rapid increase in foreign-direct-investment stock in the 1980s was not matched by a corresponding growth in the assets and employment of foreign affiliates of German transnational corporations; assets increased by about 173 per cent and employment by only 34 per cent. 8/ This suggests that foreign direct investment from Germany during the period was partly used to increase equity and control in existing affiliates, rather than to expand production capacities.

Table 5. Average size of outward foreign affiliates of transnational corporations from selected countries, in terms of foreign direct investment per affiliate

Region/country	Year	Number of outward affiliates	Outward foreign direct investment stock (billions of dollars)	Average size per affiliate (millions of dollars)
Developed countries				
Germany	1990	19 352	155.1	8.0
Japan	1990	12 522	201.4	16.1
Sweden	1990/1991	6 900	50.7	7.3
United States of America	1990	27 086	382.0	14.1
Large affiliates	1990	18 899	380.0	20.1
Small affiliates	1990	8 187	2.0	0.24
Developing countries or areas				
Republic of Korea	1991	2 066	5.1	2.4
Singapore	1989	1 845	1.5	0.8
Taiwan, Province of China	1990	873	3.1	3.6

Source: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on data from national and other official sources.

15. During the 1980s, the global spread of foreign affiliates has changed, affected by such events as regionalization, the impending creation of a single unified market in Europe and the growth of newly industrializing and other dynamic economies in Asia. This is illustrated by data for the United States of America and Germany. The geographic distribution of overseas operations of United States transnational corporations shifted towards Europe and the Asia-Pacific region (table 6). However, employment in United States affiliates abroad fell everywhere except in the Asia and Pacific region and Canada, pointing to the growing finance capital-intensity and technological sophistication of investments in the industrialized countries. 2/

Table 6. Distribution of United States affiliates abroad,
by region and country, 1990 a/

Region/country	Number		Percentage of all affiliates	
	1982	1989	1982	1989
Developed countries	11 543	12 892	62.9	68.2
Canada	2 075	2 015	11.3	10.7
Europe	7 608	8 963	41.5	47.4
France	908	1 040	5.0	5.5
Germany	1 045	1 191	5.7	6.3
Italy	540	714	2.9	3.8
Netherlands	674	845	3.7	4.5
Switzerland	524	526	2.9	2.8
United Kingdom of Great Britain and Northern Ireland	1 944	2 258	10.6	11.9
Japan	704	865	3.8	4.6
Other developed countries				
Australia	752	776	4.1	4.1
New Zealand	117	150	0.6	0.8
South Africa	287	123	1.6	0.7
Developing countries	6 442	5 833	35.1	30.9
Africa	883	514	4.8	2.7
Asia and Pacific	1 490	1 912	8.1	10.1
Latin America	3 937	3 236	21.5	17.1
Middle East	419	294	2.3	1.6
International <u>b/</u>	354	174	1.9	0.9
Total	18 339	18 899	100.0	100.0

Sources: United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

a/ Including only affiliates whose assets, sales or income exceeded \$3 million.

b/ Consisting of affiliates that have operations spanning more than one country and that are engaged in petroleum shipping, other water transportation or offshore oil and gas drilling.

16. The increased number of United States affiliates in Europe and the Asia and Pacific region during the 1980s contrasted with the trend in United States transnational corporation activities in the developing world as a whole, which decreased relative to the total number of affiliates (table 6). Both the number and the percentage of all United States transnational corporation affiliates located in Latin America and the Caribbean, Africa and the Middle East decreased. Moreover, the increase of United States transnational corporation affiliate employment in the newly industrializing countries of the Asia and Pacific region could not offset a small loss from 33 to 32 per cent in the share of developing countries in total United States transnational corporations' affiliate employment abroad. 10/

17. The pattern of overseas expansion of United States transnational corporations of different size classes has differed. Over half of the affiliate assets of small and medium-sized enterprises, defined as firms with fewer than 500 employees at headquarters, were located in the developed countries in 1982; that share rose to 57 per cent in 1989. At the same time, the share of affiliate assets of large United States transnational corporations located in the developed regions rose from 68 per cent to 79 per cent during the same period. 11/ This suggests that small and medium-sized enterprises may have a greater propensity to invest in and contribute to developing economies.

18. During the period of the 1980s, German transnational corporations, judging by the distribution of foreign affiliates, concentrated their activities in the European Community. The share of all German foreign affiliates that was located in the European Community, Asia and the economies in transition in Europe and Asia rose, while that of all other regions fell (table 7). The actual number of affiliates in Latin America and the Organization of Petroleum Exporting Countries decreased. This parallels the world-wide trend in the pattern of foreign direct investment from industrial countries, which has become increasingly concentrated in the Triad. The creation of the European Community single market by the end of 1992 has been a driving force in these developments.

19. Transnational corporation affiliates in services account for the largest shares of all foreign affiliates from Germany, Japan and the United States of America (table 8). The corresponding shares in foreign direct investment, however, are somewhat lower, except for Japan, where in 1989 outward foreign direct investment in services stood at 67 per cent as compared with a ratio of 55 per cent for foreign affiliates in services as a proportion of total foreign affiliates. 12/ The pattern of change in the sectoral distribution of foreign affiliates of transnational corporations was similar for Germany, Japan and the United States of America during the 1980s (table 8). The share of foreign affiliates in the services sector in total foreign affiliates expanded, while the shares of foreign affiliates in the primary and manufacturing sectors contracted. The shift towards services reflects the increasing importance of the services sector in the world economy and in outward foreign direct investment. Liberalization and deregulation of several service industries, such as banking and finance, the growth of demand for modern producer services and the impact of technological developments, especially on information technologies, are the main forces behind the increasing importance and internationalization of the sector.

Table 7. Distribution of foreign affiliates of German transnational corporations, by area and country, 1984 and 1990 a/

Region/country	Number		Share of all affiliates	
	1984	1990	1984	1990
Developed countries	12 412	16 747	84.7	86.5
European Community	5 357	8 780	36.5	45.4
Other Europe	3 766	3 879	25.7	20.0
Other countries	3 289	4 088	22.4	21.1
Developing countries <u>b/</u>	1 906	2 222	13.0	11.5
Africa	253	253	1.7	1.3
Latin America	1 089	1 027	7.4	5.3
Asia	564	942	3.8	4.9
Organization of Petroleum Exporting Countries	325	241	2.2	1.2
Economies in transition	14	142	0.1	0.7
Total	14 657	19 352	100.0	100.0

Source: Deutsche Bundesbank, Statistical Supplements to the Monthly Reports of the Deutsche Bundesbank, Series 3, Balance of payments statistics, No. 4, April 1992, pp. 4-13.

a/ Including only affiliates whose balance sheet total exceeds DM 500,000.

b/ Excluding members of the Organization of Petroleum Exporting Countries.

Table 8. Distribution of outward affiliates of major investing countries, by sector

Country	Year		All	Sectors		
				Primary	Manufacturing	Services
Germany <u>a/</u>	1984	Number	14 657	558	4 936	9 163
		Percentage	100	4	34	63
	1990	Number	19 352	422	5 729	13 201
		Percentage	100	2	30	68
Japan <u>b/</u>	1980	Number	3 567	194	1 587	1 786
		Percentage	100	5	44	50
	1990	Number	7 986	194	3 408	4 384
		Percentage	100	2	43	55
United States of America <u>c/</u>	1982	Number	18 339	2 084	7 005	9 250
		Percentage	100	11	38	50
	1989	Number	18 899	1 682	7 552	9 665
		Percentage	100	9	40	51

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on Deutsche Bundesbank, Statistical Supplements to the Monthly Reports of the Deutsche Bundesbank, Series 3, Balance of payments statistics, No. 4, April 1992; Japan, Ministry of International Trade and Industry, Kaigai Toshi Tokei Soran, No. 1 (Tokyo, Toyo Hoki Shuppam, 1983); and Wagakuni Kigyo No Kaigai Jigyo Katsudo, No. 21 (Tokyo, Printing Bureau, Ministry of Finance, 1992); United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

a/ Including only affiliates whose balance sheet total exceeds DM 500,000.

b/ Including only affiliates of transnational corporations, excluding those in banking and insurance that responded to a questionnaire on foreign direct investment and that continued their foreign operations.

c/ Including only affiliates whose assets, sales or income exceeded \$3 million.

20. Another important factor behind the high share of foreign services affiliates in the total number of affiliates abroad, for all three home countries mentioned above, is the strong tendency by industrial corporations to establish service affiliates overseas. The reason for this is primarily the need to supply foreign affiliates with the necessary producer services in such areas as information gathering, research and development and finance, in addition to the establishment of marketing, finance and trading affiliates. ^{13/} Thus, data on foreign affiliates by industry of parents may often underestimate the relative importance of the services sector in foreign direct investment.

II. CONCENTRATION OF TRANSNATIONAL CORPORATION ACTIVITY

21. While the universe of transnational corporations is large, it is actually highly concentrated in terms of control over foreign assets. In fact, roughly 1 per cent of parent transnational corporations in each country for which data are available account for about half of foreign-direct-investment stock or total affiliate assets (table 9). Larger transnational corporations have not only undertaken heavy foreign direct investments over time but also have the advantage of having started their foreign operations earlier. Small- and medium-sized enterprises are relatively new entrants in the arena of overseas operations.

22. Among firms based in major home countries, 32 transnational corporations from France, 20 from Germany and 22 from the United States of America accounted for 40 to 50 per cent of the total foreign affiliate assets or foreign-direct-investment stocks of their respective home countries in 1990, while only 10 firms from the Netherlands controlled 45 per cent of its outward investment stock. For German transnational corporations, concentration increased somewhat in the period 1976-1985 and stabilized during the remainder of the decade, with some 10 firms accounting for 35 per cent of the country's outward investment. This shows that, during that period, large corporations outpaced smaller ones in establishing global networks in sales and production. In the late 1980s, however, smaller transnational firms followed large corporations into the global marketplace, and as a result, concentration has apparently stabilized.

23. Despite a high degree of concentration, small and medium-sized enterprises account for a significant proportion of all transnational corporations and an increasing proportion of their affiliates. During the 1980s, small and medium-sized enterprises from the United States of America came to account for a larger share of the number of United States transnational corporations and a greater proportion of United States affiliates in foreign countries than before (table 10). In the case of Japan, the ratio of small and medium-sized parent transnational corporations to total parent transnational corporations, excluding, for both groups, transnational corporations in banking and insurance, decreased, but the proportion of new equity investments for which they account increased. Data for the mid-1970s and the mid-1980s also indicate that the share of small and medium-sized enterprises in total foreign-direct-investment outflow from Japan increased substantially; the average share in the mid-1980s was 15 per cent, while in the mid-1970s the figure was 6 per cent. ^{14/}

Table 9. Concentration of ownership of foreign affiliate assets or foreign direct investment

Country	Year	Percentage of parent companies	Number of parent companies	Percentage of total foreign affiliate assets	Percentage of total FDI stock
Austria	1990	6	41	65 <u>a/</u>	..
		14	95	84 <u>a/</u>	..
		46	312	98 <u>a/</u>	..
Brazil	1991	2	11	..	35 <u>b/</u>
		5	28	..	52 <u>b/</u>
Finland	1991	6	80	..	90
France	1990	0.5	10	..	25
		1.6	32	..	50
		10.8	223	..	90
Germany <u>c/</u>	1990	0.1	10	32	35
		0.3	20	42	45
		0.7	50	69	58
	1985	0.5	27	..	50
	1976	0.9	31	..	50
Italy	1989	..	3 <u>d/</u>	51 <u>e/</u>	..
		..	5 <u>d/</u>	76 <u>e/</u>	..
		..	10 <u>d/</u>	84 <u>e/</u>	..
Netherlands	1990	1	10	..	45
New Zealand	1990-91	5	12	..	97 <u>b/</u>
Spain	1991	8	..	..	92
Sweden	1991	0.5	18	51	..
		1.5	51	75	..
United States of America <u>f/</u>	1990	1	22	45	..
		2	44	57	..
		5	109	75	..
		10	218	86	..
		20	437	94	..
		25	546	96	..
		50	1 091	99	..

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on unpublished data from national and other official sources.

(Footnotes on following page)

(Footnotes to table 9)

a/ Percentage of affiliate nominal capital.

b/ Share of foreign-direct-investment flows, not stock.

c/ Concentration ratios for transnational corporations with overseas affiliates whose balance sheet total exceeded DM 500,000.

d/ Number of financial or holding company parent groups.

e/ Refers to sales.

f/ Concentration ratios for non-bank parents of non-bank affiliates whose assets, sales or income exceeded \$3 million.

Table 10. Small and medium-sized transnational corporations and their affiliates as a proportion of all transnational corporations from Japan and the United States of America

(Percentage)

Share of small and medium-sized transnational corporations in total for all transnational corporations in terms of:	Japan a/		United States of America b/	
	1980	1990	1982	1990
Number of parent firms c/	31.0	21.2	23.5	28.3
Number of affiliates	..	..	5.2	7.1
Assets of affiliates	..	..	1.7	4.0
Number of new equity investments d/	41.3	53.8 e/	..	..

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on unpublished data from the United States Department of Commerce; Ministry of International Trade and Industry, Kaigai Toshi Tokei Soran, No. 1 (Tokyo, Toyo Hoki Shuppan, 1983); Wagakuni Kigyo No Kaigai Jigyo Katsudo, No. 21 (Tokyo, Printing Bureau, Ministry of Finance, 1992); Small and Medium Enterprise Agency, Chusho Kigyo Hakusho (White Paper on Small and Medium Enterprise), Tokyo, Ministry of Finance Printing Bureau, various issues.

a/ The data do not cover banking and insurance industries. The definition of small and medium-sized enterprises adopted by the Small and Medium Enterprise Agency of Japan is as follows: in wholesale trade, enterprises with capital less than 30 million yen and employment less than 100; in retail trade and other services, enterprises with capital less than 100 million yen and employment less than 50; and in other industries, enterprises with capital less than 100 million yen and employment less than 300.

b/ United States small and medium-sized transnational corporations are non-bank parents of non-bank affiliates with affiliate assets, sales or income greater than \$3 million with fewer than 500 employees at the parent.

c/ Data on Japanese small and medium-sized parent corporations, obtained from the Ministry of International Trade and Industry, are defined only in terms of the capital criteria in footnote a.

d/ New equity investments refer to investments in initial capital acquisition (thus excluding additional investments by the same company in the same affiliate) and establishment of new subsidiaries. Loan investments, which are an important component of foreign direct investment, are also excluded.

e/ For 1989.

This may suggest that larger transnational corporations from Japan, with more extensive overseas operations, probably invest more in existing affiliates, while small and medium-sized enterprises tend to expand through the establishment of new affiliates.

III. THE LARGEST 100 TRANSNATIONAL CORPORATIONS

24. Since transnational corporation activity is heavily concentrated among a small number of companies, it is important to examine the nature and pattern of overseas operations of the largest transnational corporations. The largest 100 transnational corporations, excluding those in banking and finance, 15/ ranked by the size of their foreign assets (table 11), accounted for \$3.2 trillion in global assets in 1990, of which an estimated \$1.2 trillion was outside their respective home countries. Among the largest 100 transnational corporations, 53 are based in France, Germany, the Netherlands and the United States of America. These companies are estimated to account for roughly \$280 billion of the world stock of outward investment in 1990 and about one third of the combined outward stocks of their countries. This suggests that, if other home countries have a similar concentration of foreign direct investment, the largest 100 corporations might account for about a third of the total outward stock of foreign direct investment.

25. Concentration of overseas activity, noted earlier for the universe of transnational corporations as a whole, also prevails within the group of the largest transnational corporations. The largest 10 transnational corporations, in 1990, controlled one quarter of total assets and a third of the foreign assets of the group (table 12). A similar pattern of concentration applies to the distribution of foreign and total sales of the group.

26. Four home countries account for almost two thirds of the transnational corporations in the top 100 (table 13). United States corporations account for a third of the number, as well as a third of the foreign assets, of the group (table 14). This position has resulted from an early lead in foreign direct investment after the Second World War, as well as rapid technical progress and a large and growing home market, which stimulated the development of firm-specific advantages that helped United States corporations compete abroad. About another third of the foreign assets of the top 100 is controlled by firms from France, Japan and the United Kingdom, which re-entered international production at various times as their economies recovered following the Second World War.

27. As for industrial distribution, 12 petroleum companies control over a quarter trillion dollars in foreign assets, or 21 per cent of the foreign assets of the top 100 (table 15). Firms in the petroleum industry have traditionally been large resource-seeking foreign investors. On the other hand, automotive manufacturers have expanded abroad in search of lower labour costs and to circumvent trade barriers. The petroleum, automotive, chemical and pharmaceutical industries together account for over half of the largest 100 transnational corporations' foreign assets.

Table 11. The largest 100 non-financial transnational corporations, ranked by foreign assets, 1990

Rank	Corporation	Country	Industry g/	Foreign assets (billions of dollars)	Foreign sales (billions of dollars)	Total sales	Foreign employment	Total employment
1	Royal Dutch Shell	United Kingdom/Netherlands	Petroleum refining	69.2b/	106.4	47.1b/	106.5	137 000
2	Ford	United States	Motor vehicles and parts	55.2	173.7	47.3	97.7	370 303
3	GM	United States	Motor vehicles and parts	52.6	180.2	37.3	122.0	761 000
4	Exxon	United States	Petroleum refining	51.6	87.7	90.5	105.5	104 000
5	IBM	United States	Computers	45.7	87.6	41.9	69.0	373 816
6	British Petroleum	United Kingdom	Petroleum refining	31.6	59.3	43.3	59.3	118 050
7	Nestle	Switzerland	Food	...	27.9	33.0	33.7	192 699
8	Asea Brown Boveri	Switzerland	Industrial and farm equipment	26.9	30.2	25.6g/	26.7	200 177
9	Philips Electronics	Netherlands	Electronics	23.3	30.6	28.5g/	30.8	215 154
10	Mobil	United States	Petroleum refining	22.3	41.7	44.3	57.8	217 149
11	Unilever	United Kingdom/Netherlands	Food	...	24.7	16.7b/	39.6	27 593
12	Fiat	Italy	Motor vehicles and parts	19.5	66.3	20.7g/	47.5	261 000
13	Siemens	Germany	Electronics	...	50.1	14.7g/	39.2	66 712
14	Volkswagen	Germany	Motor vehicles and parts	...	42.0	25.5g/	42.1	141 740
15	Elf Aquitaine	France	Petroleum refining	17.0	42.6	11.4g/	32.4	95 934
16	Mitsubishi	Japan	Trading	16.7	73.8	45.5	129.3	33 957
17	GE	United States	Electronics	16.5	153.9	8.3	57.7	...
18	Toyota	Japan	Motor vehicles and parts	14.6	55.5	26.3	64.5	62 580
19	Alcatel Alsthom	France	Electronics	15.3	38.2	13.0	26.6	11 326
20	Sony	Japan	Electronics	...	27.6	12.7	20.9	112 966
21	Mitsui	Japan	Trading	15.0	60.8	48.1	136.2	52 580
22	Matsushita Electric	Japan	Electronics	...	49.4	16.5	37.8	9 094
23	Hewlett-Packard	United States	Electronics	14.6	20.7	4.6	5.7	59 216
24	Bayer	Germany	Chemicals	14.2	25.4	20.3	25.9	...
25	B.A.T. Industries	United Kingdom	Tobacco	...	48.2	16.7	19.4	80 000
26	Ferruzzi/Montedison	Italy	Food	13.5	30.8	9.1	14.0	95 308
27	ENI	Italy	Petroleum refining	...	60.5	7.9	41.8	21 789
28	Rhone-Poulenc	France	Chemicals	13.1	21.4	11.8	15.4	22 131
29	BASF	Germany	Chemicals	...	24.6	19.1g/	29.0	50 525
30	Daimler-Benz	Germany	Motor vehicles and parts	...	48.8	30.3g/	53.1	30 783
31	Nocchiet	Germany	Chemicals	...	23.8	13.1g/	27.9	74 154
32	Philip Morris	United States	Food	12.5	46.6	15.2	44.3	172 890
33	Du Pont	United States	Chemicals	11.9	38.1	17.4	40.0	70 000g/
34	Roche Holding	Switzerland	Pharmaceuticals	...	17.8	6.7g/	7.0	36 219
35	Michelin	France	Rubber and plastics	...	14.9	9.1	11.5	41 802
36	Dow Chemical	United States	Chemicals	10.9	24.0	10.3	19.8	111 533
								28 612
								62 080

/...

Table 11 (continued)

Rank	Corporation	Country	Industry	Foreign assets (billions of dollars)	Total assets (billions of dollars)	Foreign sales	Total sales	Foreign employment	Total employment
37	Amoco	United States	Petroleum refining	10.6	32.2	8.5	28.0	10 560	54 524
38	ICI	United Kingdom	Chemicals	10.5	20.8	16.6	23.1	77 939	132 100
39	Grand Metropolitan	United Kingdom	Food	10.4	17.7	9.0	14.8	...	138 149
40	Saint-Gobain	France	Building materials	9.9	17.6	7.8	12.7	69 651	104 987
41	Volvo	Sweden	Motor vehicles and parts	9.7	18.1	12.2g/	14.1	20 346	68 800
42	Petrofina	Belgium	Petroleum refining	...	12.3	5.7	17.4	...	23 800
43	Monsie	United Kingdom	Building materials	9.4	27.7	4.4	10.4	52 800	80 000
44	Electrolux	Sweden	Electronics	...	11.7	11.9g/	16.0	117 702	150 900
45	Total	France	Petroleum refining	...	20.8	17.1	23.7	23 932	55 000
46	Generale Des Eaux	France	Construction	...	27.9	5.5g/	20.5	55 983	173 000
47	C. Itch	Japan	Trading	8.6	47.8	19.1	146.6	3 620g/	7 098
48	Hissan Motor	Japan	Motor vehicles and parts	...	36.4	16.8	35.7	30 050	129 546
49	RTZ	United Kingdom	Mining and crude-oil production	8.4	9.3	7.3	9.3	58 153	73 612
50	Chevron	United States	Petroleum refining	8.4g/	35.1	9.8	38.6	...	54 208
51	Xerox	United States	Scientific and photographic equipment	8.0	31.5	7.5	18.4	...	110 000
52	Stora	Sweden	Forestry products	...	15.0	8.9g/	11.1	36 818	69 700
53	Texasco	United States	Petroleum refining	7.8	26.0	18.0	40.9	...	39 199
54	Alcan Aluminium	Canada	Metal products	7.8	10.6	7.6	8.9	41 040	55 500
55	Pirelli	Italy	Rubber and plastics	...	10.5	6.8	8.4	49 466	68 703
56	ITT	United States	Diversified services	7.5	49.0	6.5	20.6	...	114 000
57	Renault	France	Motor vehicles and parts	7.4	23.5	12.2	30.2	42 492	157 378
58	Thomson	France	Electronics	7.4	20.5	9.8g/	13.9	55 225	105 460
59	Thomson Corporation	Canada	Publishing and printing	7.4	7.9	4.8	5.3	...	44 800
60	Pechiney	France	Metals	7.3	14.3	8.6	14.2	39 458	70 460
61	Solvay	Belgium	Chemicals	...	8.9	7.2	7.7	36 578	45 671
62	Holderbank	Switzerland	Building materials	...	7.4	3.4g/	3.8	27 754	29 557
63	Sandoz	Switzerland	Pharmaceuticals	6.7	10.1	8.7g/	9.0	42 449	52 640
64	Honda	Japan	Motor vehicles and parts	6.7	18.0	16.1	26.9	23 760g/	79 200
65	Procter & Gamble	United States	Soaps, cosmetics	6.5	18.5	9.6	24.1	25 810g/	88 800
66	Eastman Kodak	United States	Scientific and photographic equipment	6.4	24.1	5.8	18.9	53 780	134 450
67	Marubeni	Japan	Trading	6.3	54.9	38.1	131.0	3 500	9 905
68	Glaxo Holdings	United Kingdom	Pharmaceuticals	...	7.6	4.4g/	5.0	34 165	41 000
69	Olivetti	Italy	Computers	...	12.5	4.8g/	7.5	26 303	53 679
70	BHP	Australia	Metals	6.0	16.6	3.4	10.8	5 100	52 000

Table 11 (continued)

Rank	Corporation	Country	Industry	foreign assets (billions of dollars)	foreign sales (billions of dollars)	Total sales	foreign employment	Total employment
71	Fletcher Challenge	New Zealand	Forestry products	5.9	10.4	7.3	...	40 000
72	Seagram	Canada	Beverages	5.7	10.2	4.8	9 328	17 600
73	Chrysler	United States	Motor vehicles and parts	5.7	46.4	8.5	30 784	124 000
74	Tenneco	United States	Industrial and farm equipment	5.6	19.0	14.5	...	92 000
75	Unior-Sacilor	France	Metals	...	20.8	17.6	31 025	97 300
76	Norsk Hydro	Norway	Chemicals	5.5	12.0	9.8	16 745	33 042
77	Robert Bosch	Germany	Motor vehicles and parts	...	15.7	20.0	62 087	179 636
78	Tohiba	Japan	Electronics	...	32.7	29.7	22 996	142 000
79	Alzo	Netherlands	Metal products	5.3	8.1	9.5	47 700	69 800
80	Smithkline Beecham	United Kingdom	Pharmaceuticals	5.2	7.5	8.5	46 413	57 300
81	Ciba - Geigy	Switzerland	Chemicals	5.2	20.5	7.9	69 702	94 141
82	Bridgestone	Japan	Rubber and plastics	...	13.0	13.2	56 000	87 233
83	Alcoa	United States	Metals	5.1	11.4	10.7	27 391	63 700
84	Mowlett-Packard	United States	Computers	5.1	11.4	8.1	35 000	...
85	Digital Equipment	United States	Computers	5.1	11.7	13.2	...	124 000
86	S&P	Sweden	Metal products	...	5.5	4.7	48 075	53 995
87	Atlantic Richfield	United States	Petroleum refining	4.9	23.9	18.8	...	27 300
88	Washio Iwai	Japan	Trading	...	32.1	107.8	...	7 392
89	GTE	United States	Telecommunications	4.9	33.8	16.4	35 000	177 000
90	Coca-Cola	United States	Beverages	4.8	9.3	10.2	...	24 000
91	Svenska Cellulosa	Sweden	Soaps and cosmetics	4.8	8.6	5.3	19 590	30 139
92	Peugeot	France	Motor vehicles and parts	4.8	22.6	29.5	31 820	159 100
93	3M	United States	Scientific and photographic equipment	4.7	11.1	13.0	39 000	89 601
94	United Technologies	United States	Aerospace	4.7	15.9	21.4	84 744	192 600
95	McDonald's	United States	Restaurants	4.6	10.7	6.6	...	177 000
96	Cable and Wireless	United Kingdom	Telecommunications	4.6	7.2	3.8	28 261	37 681
97	Lowrho	United Kingdom	Trading	...	7.0	9.3	127 369	142 159
98	Johnson & Johnson	United States	Pharmaceuticals	4.4	9.5	11.2	44 000	82 200
99	Veba	Germany	Trading	4.2	30.8	32.9	14 696	106 877
100	L'Oréal	France	Beverages	4.2	8.8	3.7	...	14 297

Sources: United Nations, Department of Economic and Social Development, Transnational Corporations and Management Division, based on company annual financial statements, Worldscope company accounts database, unpublished sources from companies, and John M. Stopford (ed.), Directory of Multinationals (New York, Macmillan, 1992). The Worldscope database uses standardized data definitions to adjust for differences in accounting terminology. Data for United States companies with fiscal year-end up to 10 February 1991, as well as for non-United States companies with fiscal year-end until 15 January 1991, are classified as 1990 data.

(Footnotes on following page)

(Footnotes to table 11)

a/ Industry classification of companies follows that in the Fortune Global 500 List in Fortune, 29 July 1991 and the Fortune Global Service 500 List in Fortune, 26 August 1991, except for GTE, ITT and McDonald's corporations. In the Fortune classification, companies are included in the industry or service that represents the greatest volume of their sales; industry groups are based on categories established by the United States Office of Management and Budget. Several companies, however, are highly diversified. These companies include 3M, Ferruzzi/Montedison, GE, Grand Metropolitan, Hanson, ITT, Sandoz, Tenneco, United Technologies and Veba.

b/ Excluding other European countries.

c/ For 1992.

d/ Data for foreign assets not available; ranking is according to foreign assets estimated by the Transnational Corporations and Management Division on the basis of the ratio of foreign to total employment, foreign to total fixed assets or other similar ratios.

e/ Including export sales which cannot be subtracted out.

f/ Although 38 per cent of UniLever assets are outside Europe, it is estimated that about 80 per cent of the corporation's business is outside the two home countries.

g/ For 1991.

h/ Employment in Europe only.

i/ For 1993.

Table 12. Transnationalization and concentration ratios
for the largest 100 transnational corporations,
by assets and foreign sales, 1990

Item	<u>Share in top 100</u>		<u>Share in top 100</u>		Share of foreign in total assets	Share of foreign in total sales
	Total assets	Foreign assets <u>a/</u>	Total sales	Foreign sales		
Top 10	26.1	33.6	23.0	30.3	49.1	61.9
Top 25	50.7	53.7	46.6	51.1	40.4	51.6
Top 50	72.4	75.8	69.8	71.9	40.0	48.5
Top 100	100.0	100.0	100.0	100.0	38.1	47.1
Value (billions of dollars)	3 166.0	1 207.7	3 076.1	1 449.7		

Source: Based on table 11.

a/ Estimates for foreign assets were used where data was missing.

Table 13. The largest transnational corporations from four major home countries and others, by industry, 1990

	Top four countries	United States of America	France	Japan	United Kingdom	Other
Petroleum refining	9	6	2	0	1	3
Chemicals and pharmaceuticals <u>a/</u>	8	4	1	0	3	9
Industrial and other equipment <u>b/</u>	8	8	0	0	0	2
Motor vehicles and parts	8	3	2	3	0	5
Electronics	6	1	2	3	0	3
Trading	6	0	0	5	1	1
Food, beverages and tobacco	5	2	1	0	2	4
Other services <u>c/</u>	5	3	1	0	1	2
Metals and mining <u>d/</u>	4	1	2	0	1	4
Other manufacturing <u>e/</u>	4	0	2	1	1	4
All industries	63	28	13	12	10	37

Source: Based on table 11.

a/ Including companies from the chemicals, pharmaceuticals, and soaps and cosmetics industries.

b/ Including companies from the aerospace, computer, industrial and farm equipment, and scientific and photographic equipment industries.

c/ Including companies from the construction, diversified services, publishing and printing, restaurants and telecommunications industries.

d/ Including companies from the metals, metal products, and mining and crude-oil production industries.

e/ Including companies from the building materials, forestry products, and rubber and plastics industries.

Table 14. The largest 100 transnational corporations, and their foreign and total assets, by home country, and gross national product for home countries, 1990

Home country (1)	Number of firms (2)	Sum of foreign assets ^{a/} (3)	Sum of total assets (4)	Share of column in		Gross national product (7)
				top hundred's total foreign assets (5)	column 4 (6)	
		(billions of dollars)				(billions of dollars)
United States of America	28	393.9	1 263.7	32.6	31.2	5 392.2
France	13	121.1	294.0	10.0	41.2	1 190.8
Japan	12	121.7	501.9	10.1	24.3	2 942.9
United Kingdom of Great Britain and Northern Ireland	10	104.7	212.2	8.7	49.3	975.2
Germany	8	98.3	261.3	8.1	37.6	1 488.2
Switzerland	6	84.3	113.9	7.0	74.0	224.9
Italy	5	60.0	180.5	5.0	33.2	1 090.8
Sweden	5	36.5	58.9	3.0	62.0	228.1
Canada	3	20.9	28.7	1.7	72.7	570.2
United Kingdom/ Netherlands	2	89.0	131.2	7.4	67.9	..
Australia	2	20.6	37.3	1.7	55.2	296.3
Belgium	2	16.6	21.3	1.4	77.9	192.4
Netherlands	2	28.5	38.7	2.4	73.6	279.2
Norway	1	5.5	12.0	0.5	46.1	105.9
New Zealand	1	5.9	10.4	0.5	57.0	42.8
All countries	100	1 207.7	3 166.0	100.0	38.1	..

Sources: Based on table 11 and World Bank, World Development Report, 1992: Development and the Environment (New York, Oxford University Press, 1992).

^{a/} Estimates for foreign assets were used where the data was not available.

Table 15. The largest 100 hundred corporations, number of firms and assets, by industry, 1990

Industry (1)	Sum of number of firms (2)	Sum of foreign assets <u>a/</u> (3)	Sum of total assets (4)	Share of column 3 in top hundred's total foreign assets (5)	Share of column 3 in column 4 (6)
(billions of dollars)					
Chemicals and pharmaceuticals <u>b/</u>	17	149.6	299.1	12.4	50.0
Motor vehicles and parts	13	219.8	747.1	18.2	29.4
Petroleum refining	12	255.1	548.5	21.1	46.5
Industrial and other equipment <u>c/</u>	10	118.3	255.0	9.8	46.4
Electronics	9	125.8	414.8	10.4	30.3
Food, beverages and tobacco	9	112.1	224.1	9.3	50.0
Metals and mining <u>d/</u>	8	50.4	96.6	4.2	52.1
Trading	7	60.1	307.2	5.0	19.6
Other industrial <u>e/</u>	8	63.8	116.3	5.3	54.8
Other services <u>f/</u>	7	52.6	157.2	4.4	33.5
All industries	100	1 207.7	3 166.0	100.0	38.1

Source: Based on table 11.

a/ Estimates for foreign assets were used where the data were not available.

b/ Including companies from the chemicals, pharmaceuticals, and soaps and cosmetics industries.

c/ Including companies from the aerospace, computer, industrial and farm equipment, and scientific and photographic equipment industries.

d/ Including companies from the metals, metal products, and mining and crude-oil production industries.

e/ Including companies from the building materials, forestry products, and rubber and plastics industries.

f/ Including companies from the construction, diversified services, publishing and printing, restaurants and telecommunications industries.

/...

28. The largest transnational corporations from the United States of America and Europe are distributed among a wide range of industries (table 13). In contrast, the largest Japanese transnational corporations are concentrated in two manufacturing industries (the automotive and electronics industries), and general trading. Among other factors, trade frictions with major trading partners may explain the concentration of the largest Japanese manufacturing transnational corporations in automotive and electronic manufacturing. The five Japanese trading corporations, the sogo shosha, are considered the engines of the successful Japanese export drive after the Second World War.

IV. TRANSNATIONALIZATION DURING THE 1980s

29. The degree of transnationalization, which can be measured by the ratio of foreign activity (in terms of foreign assets, sales, employment or research and development) to total activity (measured by the corresponding totals), is an important index for measuring the relative importance of transnational corporations' foreign activities. The top 100 transnational corporations have, on average, 38 per cent of their assets located outside their home countries. Moreover, the larger the size of the transnational corporation in terms of foreign assets, the higher the degree of transnationalization (table 12).

30. The degree of transnationalization, however, varies by country. Enterprises from large home economies appear to have lower shares of assets in foreign locations. In the top 100, in 1990, transnational corporations from Germany, Italy and the United States of America had roughly a third of their assets overseas; transnational corporations from the United Kingdom and France had larger shares of assets overseas; and Japanese companies had under a quarter of their assets in foreign countries (table 14). On the other hand, large transnational corporations from smaller economies have larger shares of their assets in foreign countries, primarily because their small domestic markets do not allow the development of cost-saving economies of scale in production. Firms from Belgium, the Netherlands and Switzerland among the top 100 located about three quarters of their assets in foreign countries.

31. The degree of transnationalization also varies by industry (table 15). Among the industries to which many of the top 100 transnational corporations belong, the petroleum, chemical and pharmaceutical, electronics and industrial and other equipment industries have higher than average shares of foreign assets in total assets. The automotive industry, however, is below average in the degree of its transnationalization; automotive manufacturers have generally established themselves in large market economies, often their own, to achieve economies of scale and to be near key suppliers.

32. The extent to which transnational corporations from different home countries have spread their activities throughout the world during the 1980s has varied. The degree of transnationalization of United States transnational corporations appears to have decreased. The percentage ratio of affiliate assets, sales and employment in total assets, sales and employment all fell between the years 1982 and 1989 (table 16). This decline is largely attributable to a reduction in the ratios for United States transnational banks and wholesale trading. The sharp drop in the ratio for the banking industry is a result, to some extent, of the deteriorating financial position of

Table 16. Share of foreign affiliate assets, sales and employment in totals for United States transnational corporations, by industry of parent, 1982 and 1989 ^{a/}

(percentage)

Sector	Assets		Sales		Employment	
	1982	1989	1982	1989	1982	1989
All	26.4	23.7	29.4	29.1	26.0	25.6
Petroleum	32.8	38.7	38.7	43.1	29.3	32.2
Manufacturing	27.3	27.3	30.3	33.7	31.4	30.7
Wholesale trade	25.3	19.3	25.4	21.0	25.9	28.0
Banking	35.9	28.2	41.0	29.6	18.0	12.6
Finance	12.9	13.5	17.2	18.6	28.7	31.5
Other services	15.4	20.2	16.1	19.3	12.8	17.4
Other industries	7.5	8.1	11.3	12.1	12.4	14.7

Sources: United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

^{a/} Totals represent the respective sums of parent and affiliate assets, sales, employment and research and development expenditures.

transnational banks, which in turn was affected by overextension of real estate loans and loans to indebted developing countries in the 1980s. However, the degree of transnationalization of corporations in the petroleum industry increased markedly. Facing a decline in international oil prices in the 1980s, transnational corporations in the United States petroleum industry, which has a higher unit cost of extraction than petroleum extraction in other regions, expanded their foreign operations. The transnational content in terms of sales of United States manufacturing companies also increased, but only slightly.

33. The share of foreign affiliate assets of transnational corporations based in Germany grew at nearly the same rate as foreign-direct-investment stock during the 1980s, reaching about 30 per cent in total assets of all German companies in 1990 (table 17). 16/ The ratio of foreign affiliate employment to total domestic employment, however, grew at a relatively lower rate and reached 8 per cent of full domestic employment in 1990. The tendency of German transnational corporations to invest in industries with high capital intensity, as well as the restructuring of organizations typically observed in the late 1980s, may account for the slow growth of the affiliate-to-total-employment ratio. It remains to be seen if the degree of transnationalization of German firms will be affected by German unification and whether the process will divert the outward expansion of German corporations. 17/

34. Transnational corporations are increasing their degree of transnationalization not only in terms of assets, sales and employment, but also in terms of research-and-development activity. For example, the share of United States foreign affiliates in the research-and-development expenditures of their parents increased between 1982 and 1989 (table 18). In addition, majority-owned affiliates tend to account for a higher percentage share of total research-and-development expenditure by transnational corporations than all affiliates (table 18). This reflects the fact that parent firms exercise a greater control over their foreign affiliates. Available data on patents also generally indicates the rising importance of research and development in foreign locations. For example, between the early 1970s and mid-1980s, the share of patents filed in the United States of America by transnational corporations worldwide that are credited to research undertaken outside the home country of the parent company has increased in 7 out of 11 countries. 18/

Table 17. Transnationalization of German enterprises,
1980-1990

Year	Assets of foreign affiliates of German transnational corporations		Employment of foreign affiliates of German transnational corporations		Foreign direct investment as a share of assets of foreign affiliates of German transnational corporations (percentage)
	Amount (millions of DM)	Share in total assets of German non-bank companies ^{a/} (percentage)	Amount (millions of DM)	Share in total employment in Germany (percentage)	
1980	551.9	16.1	1 743	6.4	15.3
1981	663.3	18.4	1 762	6.5	15.4
1982	714.1	19.0	1 690	6.3	15.3
1983	777.2	19.9	1 617	6.1	16.0
1984	897.8	22.0	1 697	6.4	16.2
1985	891.1	21.5	1 798	6.7	16.5
1986	906.5	21.0	1 788	6.6	16.7
1987	958.3	23.2	1 881	6.9	16.4
1988	1 164.1	26.8	1 974	7.2	15.9
1989	1 324.3	28.6	2 172	7.8	15.6
1990	1 507.2	29.6	2 328	8.2	15.4

Sources: Deutsche Bundesbank, Monthly Report of the Deutsche Bundesbank, various issues; and Statistische Bundesamt, Statistisches Jahrbuch 1991 (Wiesbaden, Statistische Bundesamt, 1991).

^{a/} Represents the share of the assets of non-bank foreign affiliates in the total assets of non-bank German enterprises.

Table 18. Share of research-and-development expenditures of foreign affiliates of United States transnational corporations, by type of affiliate and industry, 1982 and 1989

(Percentage)

Industry	Year	By United States	By all foreign affiliates
		majority-owned affiliates as a percentage of parent firm total	as a percentage of total transnational corporations expenditures
All industries	1982	10.4	8.8
	1989	12.1	10.8
Manufacturing, total	1982	10.4	8.8
	1989	11.4	10.3
Chemical and allied products	1982	10.7	10.8
	1989	11.8	10.6
Machinery, except electrical	1982	4.1	5.2
	1989	6.0	5.7
Electrical and electronic	1982	10.1	3.3
	1989	15.2	13.2

Source: Organisation for Economic Cooperation and Development, Industrial Policy in OECD Countries: Annual Review 1992 (Paris, 1992), tables 62 and 63, p. 203, based on data from the United States Department of Commerce.

CONCLUSIONS

35. The universe of transnational corporations is large, diverse and growing. At the beginning of the 1990s, there were about 35,000 parent transnational corporations with some 170,000 affiliates covering all sectors and regions of the world economy. In addition transnational corporations, overwhelmingly based in developed countries, are also responsible for international production operations through hundreds of thousands of cooperative agreements, including technology agreements, strategic alliances and subcontracting, all of which, along with foreign-direct-investment activities, form the basis of the emerging international production system.

36. The extent of the international production networks, the degree of transnationalization and the geographic distribution of affiliates vary among parent transnational corporations based in different countries. Judging from the data for major home countries, however, there is considerable concentration of foreign activity among transnational corporations. Although thousands of small and medium-sized transnational corporations are an important part of the international production system, a relatively small number of large companies account for a significant share of transnational corporation activity as measured by foreign assets.

37. The importance of transnational corporations as market operators, especially in key industries, has implications for host countries and their policies, particularly in the light of the concentration and increasing globalization of transnational corporation activity. It suggests that a relatively small group of transnational corporations, responding to market signals, plays a major role in determining the flows of foreign direct investment and associated technology and the integration of a country within the international production system. One of the issues that have to be considered is how countries can ensure the efficient functioning of markets in order to participate in and benefit from the networks of international production and the flows of capital, goods, services and technology that are organized and managed by transnational corporations. National policies regarding development, trade and technology need to take into account the global nature of many industries, while a multilateral approach will be needed to avoid frictions arising from conflicting national approaches to economic management. Multilateral approaches will also be needed to encourage ways and means through which many developing economies in the danger of being marginalized, can be linked to the international production system.

Notes

1/ Although the data in table 1 provide a good picture of the number of companies involved in foreign-direct-investment activities and their spread, data limitations should be noted. Several countries do not report the number of transnational corporations or foreign affiliates, while others report only those with sales or assets above a minimum size, or exclude firms in certain industries. This would suggest that the number of parents and affiliates is an underestimate.

2/ It could be argued that a problem of double-counting would arise only if subsidiaries (majority-owned affiliates) of foreign enterprises were counted as parents originating in the host country. However, companies in which the equity held by foreign firms is more than 10 per cent but less than 50 per cent are also considered as affiliates of foreign transnational corporations. They could be considered as legitimate parent transnational corporations because the influence of foreign firms is not necessarily dominant and their accounts are not always consolidated with those of their ultimate parents.

3/ Based on data from the foreign-direct-investment database of the Transnational Corporations and Management Division.

4/ Japan, Ministry of International Trade and Industry, Kaigai Toshi Tokei Soran, No. 1 (Tokyo, Toyo Hoki Shuppan, 1983); and Wagakuni Kigyo No Kaigai Jigyo Katsudo, No. 21 (Tokyo, Printing Bureau, Ministry of Finance, 1992).

5/ In both 1976 and 1985, one third of the investors were individuals, sole proprietors and medium-sized enterprises. See Deutsche Bundesbank, Monthly Report of the Deutsche Bundesbank, 39 (March 1987), p. 26.

6/ This estimate is based on the number of inward foreign affiliates. The total of inward affiliates is a better estimate of the number of affiliates than the sum of outward affiliates, which tends to be an overestimate. For example, if a United States corporation holds a 30 per cent stake in a French company, the latter is counted as an outward foreign affiliate by the United States. If the French company holds a 40 per cent stake in a Brazilian company, then the latter is a direct affiliate of the French parent, as well as an indirect affiliate of the United States parent. In this case, the United States and France would report a total of three foreign affiliates of their own transnational corporations; however, France and Brazil together would report two inward affiliates, which is the actual number.

7/ See John H. Dunning, "The global economy, domestic governance strategies and transnational corporations: interactions and policy implications", Transnational Corporations (forthcoming issue). According to the MERIT-CATI Data Bank in the Netherlands, the total number of cooperative agreements is estimated at about 10,000, involving some 3,500 different parent companies during the period of 1980 to 1989. See John Hagedoorn, "Catching up or falling behind: patterns in international inter-firm technology partnering", paper presented to the Workshops on Global Trends in Foreign Direct Investment and Strategies of Transnational Corporations organized by the Transnational Corporations and Management Division, Department of Economic and Social Development and the Centro de Estudos das Relacoes Economicas Internacionais, Universidade Estadual de Campinas (Sao Paulo, 3-6 November 1992) p. 22.

8/ John Rutter, "Recent trends in international direct investment" (United States Department of Commerce, August 1992); Deutsche Bundesbank, Monthly Report of the Deutsche Bundesbank, various issues; and Statistische Bundesamt, Statistisches Jahrbuch 1991 (Wiesbaden, Statistische Bundesamt, 1991). Outward foreign-direct-investment stock of Germany increased by 260 per cent in the 1980s.

2/ Based on figures in United States Department of Commerce, U.S. Direct Investment Abroad: 1982 Benchmark Survey Data (Washington, D.C., Government Printing Office, 1985); and U.S. Direct Investment Abroad: 1989 Benchmark Survey, Final Results (Washington, D.C., Government Printing Office, 1992).

10/ Ibid.

11/ Based on data obtained from United States Department of Commerce.

12/ World Investment Directory, vol. 3, Developed Countries (United Nations publication, forthcoming).

13/ See Foreign Direct Investment and Transnational Corporations in Services (United Nations publication, Sales No. E.89.II.A.1).

14/ Based on data from Japan's Ministry of International Trade and Industry. See Masataka Fujita, "Small and medium-sized enterprises in foreign direct investment", in P. Buckley and others, eds., Technology Transfer to Developing Countries by Small and Medium-sized Enterprises (London, Macmillan, forthcoming).

15/ Banking and other financial companies have been excluded from the ranking because their total and foreign assets are not comparable to those of manufacturing or other service companies.

16/ Note that the transnationalization ratio used for Germany differs from that for the United States; the denominator for Germany is the total of assets of all German companies, while that for the United States of America is the total of assets of United States transnational corporations only.

17/ Foreign-direct-investment outflows from Germany decreased from \$28 billion in 1990 to \$21 billion in 1991. See "Growth of foreign direct investment in the 1980s: trend or bulge?" (E/C.10/1993/3).

18/ World Investment Report 1992: Transnational Corporations as Engines of Growth (United Nations publication, Sales No. E.92.II.A.19).
